

FOCUS
ALGORITHM**Partial-Quotients Division (2-digit divisor)**

To find the number of 27s in 621, first find all the partial quotients. Record them in a column to the right of the problem. Then add the partial quotients to find the final quotient or answer.

Example

$$\begin{array}{r} \text{(dividend)} \quad \text{(divisor)} \\ 621 \div 27 \end{array}$$

Ask: How many [27s] are in 621? (at least 20)

The first partial quotient is 20.

$$20 * 27 = 540$$

Subtract 540 from 621.

$$\begin{array}{r|l} 27 \overline{)621} & \\ \underline{540} & 20 \\ 81 & \\ \underline{81} & 3 \\ 0 & 23 \end{array}$$

Ask: How many [27s] are in 81? (3)

The second partial quotient is 3.

$$3 * 27 = 81$$

Subtract 81 from 81.

The difference is 0, so there is no remainder.

Add the partial quotients. The answer is 23.

$$621 \div 27 = 23$$

Check Your Understanding

Solve the following problems.

1. $273 \div 13$

2. $342 \div 19$

3. $768 \div 32$

4. $902 \div 22$

5. $425 \div 17$

6. $630 \div 42$

7. $36 \overline{)828}$

8. $57 \overline{)3,420}$